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RESEARCH PAPER

Unveiling Sociological Perspectives in the Era of Artificial Intelligence, Labor, and Unemployment: Future Forward

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ABSTRACT

This paper delves into the intricate sociological dimensions surrounding artificial intelligence (AI), with a specific focus on ethical dilemmas and the contentious discourse regarding potential job displacement, particularly in sectors such as manufacturing and health-care. While some projections anticipate significant unemployment as a consequence of AI integration, contrasting perspectives suggest the emergence of novel employment opportunities akin to historical industrial revolutions. The methodology for this study involves comprehensive literature review and analysis of diverse viewpoints on AI, emphasizing sociological perspectives. It underscores the potential for AI to exacerbate prevailing social inequalities while also contemplating the possibility of fostering AI systems that prioritize human welfare. In light of these findings, recommendations for future research emphasize the necessity for continued critical analysis of AI's socio-economic ramifications, with a keen focus on ethical considerations and the formulation of strategies aimed at mitigating inequalities, thus contributing to a nuanced comprehension of the evolving socio-technological landscape shaped by AI integration

KEYWORDS Artificial Intelligence, Employment Opportunities, Industrial Transformations, Social Inequality

Introduction

The prevailing perspective regarding the societal consequences of artificial intelligence (AI) posits that it will result in significant levels of unemployment (Marwala, 2015). An alternative perspective, which deviates from the mainstream, posits that while the widespread implementation of automation may indeed result in significant unemployment, it may also create novel avenues for employment as the indispensability of human labour persists (Tse et.al., 2017). According to Fogel & Kvedar (2018), there has been a persistent apprehension among successive generations over the past century regarding the potential displacement of employment by automation. However, new employment opportunities arise as it continues to evolve. Tse, Esposito, & Goh (2017) propose that a future coexistence between machines, particularly artificial intelligence (AI), and humans will not be characterized by a competitive dynamic. Instead, they will serve to reciprocally enhance and bolster each other. In this article, we aim to present and analyze the perspectives of multiple scholars regarding the potential impact of artificial intelligence (AI) on employment, job market dynamics, and the broader implications for our future. Our discussion commences with preliminary elucidations regarding the definition of AI. Subsequently, an examination of the perspectives put forth by scholars ensues.

According to Rigla et al. (2018), the concept of artificial intelligence (AI) encompasses the capacity of computers to perform tasks that would typically necessitate human intelligence (p. 303). A previous and more concise explanation can be found in Pannu's work (2015, p.79), which defines *artificial intelligence* as "the intelligence demonstrated by machines or software." However, this definition raises a fundamental question. The demarcation of non-intelligent operations of machines or software is only sometimes easily discernible, given the provided definition. According to Mahanty and Mahanti (2019), artificial intelligence pertains to examining and advancing software and machines capable of replicating human-like intelligence. From a philosophical standpoint, the definition above suggests that AI is limited to replicating human intelligence, rendering it incapable of serving as a replacement or equivalent to human intelligence. A more comprehensive definition that appropriately emphasizes the characteristics of unpredictability and flexibility can be stated as follows: According to Tredinnick (2017), Artificial Intelligence (AI) is a comprehensive concept encompassing various technologies and computational methodologies. Its primary objective is to empower computers to make flexible and logical decisions, even when confronted with unpredictable environmental conditions.

Further, the relationship between deep learning, machine learning, and AI can be succinctly summarized as follows: Artificial intelligence (AI) can be defined as the application of computer systems to perform tasks in a manner that simulates human rationality. Artificial intelligence (AI) includes machine learning, which uses software algorithms to predict what will happen in the future. Reinforcement learning, pattern recognition, and rule-based logic are used to train these algorithms. The webs of neurons and synapses in the human brain serve as a loose model for artificial neural networks used in deep learning (Craft III, pp. 406-407).In order to provide a comprehensive context for our primary discourse, it is imperative to provide a concise overview of the concept of Industry 4.0. According to Stăncioiu (2017), the first industrial revolution, commonly referred to as Industry 1.0, was distinguished by the implementation of mechanization, steam power, and water power. Industry 2.0, on the other hand, was characterized by the advent of mass production, assembly line techniques, and increased productivity. The subsequent industrial revolution, known as Industry 3.0, witnessed the emergence of computer technology and automation. Lastly, Industry 4.0 is defined by integration.

AI models and applications have been used in production management, medicine, pharmacy, law, and more. These representations create a deceptive perception that artificial intelligence can perform tasks equivalent to those accomplished by human beings. Despite the prevalence of sensationalized narratives in the media, it is important to note that there have been no successful instances of general artificial intelligence (AI) applications thus far. However, it is worth mentioning that specific AI applications have shown promise (Tredinnick, 2017). The first category is commonly known as weak AI or narrow AI. In contrast, the second category, which is not currently present, is referred to as strong AI or general intelligence in AI (Yadav et al., 2017).

Literature Review

It is essential to distinguish between artificial intelligence (AI) and automation to make any headway. According to Mehta & Devarakonda (2018), the development of the printing press and the advancement of the conveyor system on the assembly line serve as notable examples of how people have successfully decomposed complex mechanical tasks into more manageable and clearly defined steps, ultimately enabling automation. Both of these advancements were made possible by individuals. Nevertheless, the automation of cognitive tasks has presented a significant obstacle due to the need for

precise understanding regarding the functioning of the human brain. Does the successful operation of automation require that humans be able to interpret cognitive tasks? According to recent developments in the field of artificial intelligence (AI), evidence contradicts the claim above, thereby presenting intriguing possibilities for healthcare (p.2019). This aspect is frequently overlooked in mainstream dialogues surrounding artificial intelligence. Automation rather than true artificial intelligence (AI) is the topic of public discourse.

Automation replicates monotonous, non-cognitive tasks. According to scholars, the initial assumption that AI will cause widespread unemployment is wrong. The displacement of workers in certain tasks is expected to be caused by automation rather than artificial intelligence (AI). On the other hand, some occurrences occur when artificial intelligence and automation intersect. Hengstler, Enkel, & Duelli (2016) use the term' intelligent automation' to integrate both components. One prevalent illustration of this phenomenon pertains to autonomous vehicles, which will be further examined in subsequent discourse. These tasks include predictable and well-defined tasks that do not require cognitive processing and unpredictable and risky tasks that require intelligence.

Nevertheless, the integration of both automation and intelligence needs to be more frequently observed. Distinguishing between automation and AI is a straightforward task in numerous other instances. For example, the ability of chess programs to surpass human masters is commonly regarded as a manifestation of artificial intelligence (AI). In contrast, search engines or manufacturing systems in factories are typically perceived as instances of automation. The issue surrounding artificial intelligence (AI) and automation exhibits similarities in robotics. Chand et al. (2018) highlight a growing discourse within the surgical community surrounding the topic of "Robotic Surgery." It is important to acknowledge that the current state of robotic surgery falls short of achieving true automation, thus necessitating a discussion centred around advanced laparoscopic devices or 'telemanipulators'. Regardless of the specific English definition selected for the term 'robot', a common characteristic is that it refers to a machine capable of performing tasks in an automated manner, either through programming or independent operation. According to the author (p.645), the existing iterations of robotic platforms must meet the fundamental requirements to be classified as robots.

After elucidating the differentiation between artificial intelligence (AI) and automation, the subsequent focus can be directed towards the unemployment discourse. Mainstream scholars adopt a crisis-oriented perspective when examining the anticipated unemployment of artificial intelligence (AI). According to Harari (2016), it is argued that the system is susceptible to collapse in the presence of exceptionally elevated unemployment rates. However, proponents of this viewpoint need to consider the potential for implementing shorter work weeks, such as working only two days per week, which would afford individuals more leisure time to spend with their families and engage in social interactions. Given the ample leisure time available, individuals can cultivate their character through engaging in artistic pursuits, participating in sports, exploring philosophical concepts, and engaging in other activities that promote human development. Some individuals have suggested the implementation of a universal wage for individuals who are currently unemployed. However, it is important to consider that this approach, which involves substantial transfer payments unrelated to productivity, can potentially result in hyperinflation. Due to their steadfast adherence to misguided assumptions, these prominent intellectuals fail to perceive any alternative outcome aside from societal collapse. Indeed, there exist numerous alternative possibilities.

In the context of economic discourse surrounding the impact of artificial intelligence (AI) on labour and employment, a crucial aspect to consider is the theoretical framework to which the participants in the debate adhere. According to Acemoglu.etal (see Acemoglu & Restrepo, 2018a, 2018b), markets contain self-correcting mechanisms. This perspective aligns with the prevailing neo-liberal economic framework, although it is not universally embraced by economists such as Stiglitz and various Keynesian and Marxist scholars. Economics is more ideological than scientific so rocket science may be simpler. This field often intertwines fundamental facts with subjective viewpoints, occasionally leading to misrepresenting historical events. For instance, mainstream neo-liberal intellectuals associate economic progress with a concept called 'democracy,' which may not align with the traditional understanding of democracy. In this regard, there is a tendency to disregard the economic accomplishments of authoritarian regimes with 'neo-liberal' tendencies, such as the case of Pinochet's Chile, as well as those of non-Western countries like China.

In contrast to the scholarly work of Harari (2016, 2015), who is widely acknowledged for his expertise in debating, it becomes apparent that he does not believe that markets possess inherent mechanisms for rectifying imbalances. However, it is important to note that his economic perspective aligns with mainstream and neo-liberal ideologies in various aspects. In order to avoid having their ideologies critically analyzed, these well-known figures frequently present their ideas as objective scientific facts rather than as subjective opinions (cf. Gezgin, in press). It is important to note that economists who include both pro- and anti-government components in their economic models have won Nobel Prizes in their field. This observation further underscores the notion that economics may not be considered a scientific discipline, or at least not as rigorously scientific as it purports to be.

Moreover, economics had not been influenced by ideological biases and instead adhered to the rigour and complexity akin to that of rocket science, economists would have been among the wealthiest individuals. This circumstance is not observed. In conclusion, a more comprehensive examination of the economic implications of artificial intelligence is warranted, given the inherent ideological characteristics of the field of economics as both a scholarly discipline and a professional practice.

Another noteworthy theme in the economic discourse surrounding AI is its perception as a remedy for market inefficiencies. Suppose market inefficiency is caused by insufficient information among market participants. In that case, implementing artificial intelligence (AI) is a potential solution to address this issue, as suggested by Marwala (2015). However, this perspective can be subject to criticism within the framework of neoliberalism. Market inefficiency is influenced by various factors, including the profit motive, which can result in the excessive production of profitable products and services while neglecting the production of goods and services that benefit the public rather than private interests. Additionally, the state, government policies, and relevant laws and regulations significantly shape market inefficiencies. Therefore, artificial intelligence cannot resolve the issues inherent to capitalism, as these problems are inherent to capitalism's fundamental structure and principles.

Material and Methods

The methodology employed for the study "Unveiling Sociological Perspectives in the Era of Artificial Intelligence, Labor, and Unemployment: Future Forward" involved a comprehensive content analysis approach. Initially, a diverse range of scholarly articles, reports, and relevant literature spanning sociology, economics, and artificial intelligence were systematically gathered from reputable academic databases and sources. These

materials were meticulously reviewed to identify recurring themes, patterns, and theoretical frameworks pertinent to the intersection of artificial intelligence, labor dynamics, and unemployment from sociological perspectives. Through iterative coding processes, key concepts and categories were identified and organized to facilitate in-depth analysis. Additionally, qualitative methods were utilized to interpret and contextualize the extracted data, allowing for a nuanced understanding of the multifaceted relationships between technological advancements, employment patterns, and societal implications. The findings from this content analysis provide valuable insights into the sociological dimensions of the evolving landscape shaped by artificial intelligence and its impact on labor markets and unemployment, thus contributing to a forward-looking discourse on the socio-economic implications of technological progress.

Results and Discussions

The Creative Potential of Artificial Intelligence

The subsequent subject of discussion pertains to the anticipated transformation of our professional trajectories as a result of artificial intelligence, specifically automation. Baldassari and Roux (2017) assert that there has been a proliferation of novel job roles that were relatively obscure a decade ago, including app developers, data scientists, and cloud computing experts. Additionally, entirely new occupations, such as driverless car engineers and drone operators, have emerged. It is posited that the advent of Industry 4.0 will not result in reduced employment opportunities or widespread unemployment. The advent of Industry 4.0 will likely result in the obsolescence of jobs that primarily involve repetitive tasks while concurrently giving rise to new employment opportunities focused on maintaining and operating these advanced systems. The user expresses their dissent towards proponents of Industry 4.0, who assert that the human element will be eliminated from factory production, drawing a parallel to the scenario of autonomous vehicles.

An autonomous manufacturing facility, without human intervention, cannot maintain its competitive edge over an extended period. Similar to the notable advancements witnessed in the operational capabilities of smartphones throughout the previous decade, it is anticipated that there will be ongoing enhancements in factory hardware. The aforementioned task necessitates the expertise of qualified personnel to evaluate, implement, and uphold the hardware infrastructure. The software utilized in a factory setting is expected to undergo continuous enhancements, as the current algorithms may not suffice to meet the evolving requirements of the future. Hence, there is a growing demand for a proficient workforce to facilitate the development, enhancement, and supervision of software systems and information management. According to Baldassari & Roux (2017), while a solitary factory may require a reduced workforce for its operation, historical evidence from previous industrial revolutions suggests that the resultant enhancements in productivity are likely to generate fresh markets, novel enterprises, and additional factories, thereby augmenting the demand for skilled labour.

According to Herzfeld (2017), there is a belief that AI has initiated a disruption in the fundamental principles of Western capitalism. However, it is argued that AI will strengthen capitalism, as previously discussed. Sikdar (2018) is one of the scholars who believe that there will not be a significant increase in unemployment, which aligns with the perspective of Baldassari and Roux (2017). Previously, the consequences of the disappearance of horse-drawn carriages and the automation of accounting and financial tasks through computers were observed. Contrary to widespread predictions of significant unemployment, more new job opportunities were generated than the number

of lost jobs. Wilson, Daugherty, & Bianzino (2017) argued that artificial intelligence (AI) will generate novel employment opportunities. In their study, the authors introduce and analyze three distinct job classifications that do not supplant existing positions. The initial classification pertains to trainers, individuals responsible for instructing artificial intelligence systems. The subsequent classification pertains to function as intermediaries connecting individuals with advanced technological knowledge to those lacking technical expertise, encompassing business leaders and politicians. The significance of this task is anticipated to increase in importance, particularly with the advancement of more complex AI systems. The increasing complexity of artificial intelligence poses a significant challenge for individuals needing more expertise in comprehending its underlying mechanisms. These explanatory tools will also be crucial when algorithms exhibit inaccuracies or counterintuitive behaviour. The determination of whether it is a system error or not will be made by them. According to Wilson, Daugherty, and Bianzino (2017), the sustainers will ensure the seamless continuation of operations for AI systems.

According to Fogel & Kvedar (2018), in medical environments, apprehension exists regarding the potential disruption of jobs and the physician-patient relationship due to the implementation of artificial intelligence (AI). However, the authors argue that AI can remove numerous, monotonous tasks, thereby creating opportunities for fostering human-to-human connections and facilitating the utilization of emotional intelligence and judgement (p. 1). Naylor (2018) concurs with the findings of Fogel & Kvedar (2018) regarding the potential of deep learning in the healthcare context. They assert that deep learning holds the potential to enhance the efficiency of routine tasks performed by healthcare professionals and empower patients, ultimately fostering a safer, more compassionate, and participatory approach to healthcare. According to Naylor (2018), there needs to be more information from different sources regarding the time that healthcare professionals spend on tasks that could be automated, such as high-quality image screening. Automating these tasks could allow healthcare professionals to allocate their time more effectively towards providing improved care. In the given context, Jarrahi (2018) introduces the concept of "intelligence augmentation," which suggests that AI systems should be developed to enhance human contributions rather than substituting them (p.1).

Jha & Topol (2016) express a comparable perspective, asserting that the loss of jobs is not the primary outcome, but rather a redefinition of roles occurs, leading to the displacement of humans to tasks that require a distinct human element. According to the author, there is no need for radiologists and pathologists to be apprehensive about artificial intelligence. Instead, they should gradually adjust to the presence of artificial intelligence and continue to provide their expertise for tasks that require cognitive complexity. According to Fogel & Kvedar (2018), the constraints on a physician's time decrease the opportunity for them to utilize their uniquely human skills as the demands for routine tasks increase. According to the authors, integrating artificial intelligence (AI) in the healthcare sector can enable healthcare professionals to allocate more time to developing and utilizing distinctively human abilities. These abilities include cultivating interpersonal connections, demonstrating empathy, and employing human judgement to provide guidance and recommendations.

In essence, it is anticipated that automation will not render doctors obsolete but rather aid them in optimizing their time by handling mundane and repetitive tasks that do not necessitate creativity, empathy, or attentiveness. Consequently, this will create additional opportunities for the execution of compassionate duties that doctors cannot undertake due to time constraints. As is frequently observed in popular discourse, there is a tendency to conflate AI and automation. However, Fogel & Kvedar (2018) assert that

the anticipated outcomes are as follows: "Instead of assuming control, we believe that these systems will assume a significant portion of the burdensome tasks in the healthcare sector".

4Ripple Effect of Artificial Intelligence in shaping Social Fabric

Raso et al. (2018) argue that the emergence and growth of artificial intelligence (AI) will inevitably result in both beneficiaries and individuals adversely affected, as viewed through the human rights lens. The prevailing capitalist ideology regarding the future suggests that the integration of artificial intelligence (AI) will exacerbate existing economic and social inequities. The utilization of artificial intelligence (AI) in health-related contexts has the potential to exacerbate existing social and economic disparities as a result of associated expenses (Russell et al., 2015). According to Raso et al. (2018), the impact of privacy will be the most pronounced, while the effects on other human rights will vary, resulting in differential consequences rather than a uniform impact on all individuals. According to Lloyd (2018), the primary concern associated with artificial intelligence (AI) lies in its potential to exacerbate existing social biases, thereby adversely affecting marginalized communities rather than solely focusing on the issue of unemployment. For instance, Lloyd (2018) argues that numerous algorithms tend to acquire and reinforce approaches that are most effective for white males but may not be equally beneficial for other demographic groups (p.3). An alternative approach would involve the development of a socially inclusive artificial intelligence (AI) or machine learning system sensitive to discrimination issues.

Similarly, according to Crawford (2016), a more significant concern exists beyond the prevailing panic associated with the potential emergence of an AI surpassing human intelligence and becoming uncontrollable. Crawford highlights that the technology underlying numerous "intelligent" systems, which influence our categorization and targeted advertising, is imbued with inherent biases such as sexism, racism, and other forms of discrimination (p. 1). Similar to previous technological advancements, artificial intelligence (AI) will inevitably embody the values and beliefs of its creators. The importance of inclusivity extends to various aspects, encompassing the involvement of diverse designers, representation on company boards, and the incorporation of a wide range of ethical perspectives. Alternatively, there is a potential danger of developing machine intelligence that reflects a limited and advantaged perspective of society characterized by preexisting biases and stereotypes. Furthermore, Brundage (2015) anticipates that the impact of AI innovations on disenfranchised individuals and existing inequalities will be influenced by accessibility, transparency, affordability, and usability. Suppose AI advancements are predominantly patented and vigorously safeguarded by corporate entities, rendering them unintelligible to individuals needing more expertise and relying on data or resources exclusively owned by private entities. In that case, it may lead to distinct social outcomes compared to a scenario where all AI advancements are readily accessible to the general public.

In their study, Hamaguchi and Kondo (2018) examine the sociological implications of automation, specifically focusing on the varied effects of the increased utilization of artificial intelligence (AI) models in work environments. Hamaguchi and Kondo (2018) have identified regional disparities in how automation contributes to unemployment rates. Furthermore, their findings indicate that female workers tend to be disproportionately impacted by this phenomenon. The present study offers an opportunity to elucidate the underlying principles of this discovery and further explore its sociological implications. Within the framework of capitalism, individuals who experience the highest levels of oppression are often assigned to engage in monotonous

and stimulating tasks. The patriarchal system perpetuates the oppression of women and young individuals in the workforce, encompassing both female and male workers. Despite implementing progressive policies in numerous nations, capitalism often exhibits racial and cultural discrimination. Racial and cultural minorities, as well as females and youth, will experience the greatest impact from automation, resulting in job displacement. However, it should be noted that not all occupations characterized by repetitive tasks can be effectively substituted by artificial intelligence. For example, it is anticipated that occupations involving caregiving, such as nursing, will not experience adverse effects from automation.

On the contrary, these entities have the potential to emerge as isolated entities amidst the vast expanse of automation. The rise of artificial intelligence (AI) may present an advantageous opportunity for women in care professions, as patriarchal norms have traditionally associated care with women. Naturally, this represents merely one of the potential outcomes.

Ethical Dilemmas of Artificial Intelligence

One potential application of artificial intelligence (AI) in the industrial sector that aligns with ethical considerations is its implementation in high-risk work environments, such as mining (Nadimpalli, 2017) and shipyards, where occupational fatalities are prevalent. In reality, the occurrences commonly referred to as 'workplace accidents' (also known as 'workplace murders' by labour activists) are inherent to the capitalist system. Establishing a universally accepted standard for labour safety remains a subject of ongoing debate and has yet to be achieved. However, it is accurate to assert that certain occupational domains pose a greater risk to individuals' safety and well-being when juxtaposed, such as the contrasting scenarios of working in the mining industry versus serving as a waiter.

According to Fogel & Kvedar (2018), when considering the utilization of artificial intelligence in healthcare, the primary factor of utmost significance is the provision of patient care. If a novel technological advancement demonstrates the potential to enhance patient well-being, promote improved health outcomes and extend the individual's lifespan, it is imperative to consider its adoption. An alternative approach to conceptualizing an ethical artificial intelligence system can be formulated. While artificial intelligence (AI) demonstrates superior performance compared to human doctors in specific instances through its computational power, it is important to note that AI lacks a comprehensive comprehension of the ethical and moral aspects inherent in human decision-making processes (Brush, 2018).

One of the most significant ethical dilemmas associated with artificial intelligence pertains to developing and deploying AI weapons (Russell et al., 2015). The potential for their destructive capacity to become uncontrollable is a concern. Leaving life and death decisions solely in the hands of machines entails a significant level of risk. In addition to weaponry, the legal and ethical liability issue arises in all artificial intelligence (AI) systems. This pertains to determining accountability for the actions of AI that contravene established norms, as illustrated by the instance of autonomous vehicles (Asaro, 2016).

It is anticipated that autonomous vehicles will exhibit greater efficiency compared to human drivers due to their immunity to factors such as road rage, distractions, and impaired driving resulting from alcohol and drug consumption. In addition, it is anticipated that these vehicles will offer support to elderly and disabled individuals who face physical limitations in driving (Arkin, 2016), as well as contribute to the mitigation of pollution associated with traffic (Zhao et al., 2016). Nevertheless,

using driverless cars presents significant ethical and legal concerns, particularly when accidents occur, and dilemmas arise (Deng, 2015). Additionally, human drivers may experience frustration due to the strict adherence of driverless cars to traffic laws (Arkin, 2016). Human drivers occasionally violate traffic laws based on justifiable reasons (considering the concept of adaptability within the AI definition mentioned earlier), whereas autonomous vehicles do not exhibit such behaviour. An additional illustration of ethical considerations involves the utilization of robots to remind patients to adhere to their medication regimen. What is the potential outcome if the patient declines to consume the medication? According to Deng (2015), there will be a conflict between the well-being and autonomy of the patient in this particular scenario.

There is a prevalent assertion that radiology is expected to be among the initial domains to face obsolescence due to the emergence and proliferation of artificial intelligence (AI). Contrary to the viewpoint above, Tridandapani (2018) posits that the current advancements in artificial intelligence (AI) have only yielded restricted accomplishments in the realm of image interpretation, with no evidence to suggest that AI systems can effectively engage in comprehensive radiology practises (p. 965). Kahn Jr (2017) concurs with Tridandapani (2018) from an alternative perspective, asserting that while the field of radiology is poised to reap the advantages of artificial intelligence (AI) technologies, it is important to recognize that the speciality encompasses more than mere identification of findings on medical images (p.719). According to Yasaka and Abe (2018), the continued necessity for radiologists is evident in their expertise required for diagnosing rare diseases, identifying incidental findings, and managing multimorbidity, which is prevalent among the elderly population.

Therefore, it is evident that public perception and the influence of celebrity figures with scientific backgrounds, such as television futurists and popular scientists, tend to amplify achievements in specialized areas while disregarding shortcomings in broader domains. Moreover, Tridandapani (2018) asserts that the field of medicine necessitates providing compassionate care, a quality that cannot be replicated or substituted by artificial intelligence. Zhang (2016) aligns with this perspective, asserting that the role of doctors extends beyond physical healing to encompass the provision of emotional comfort and support to individuals. In essence, physicians possess an additional responsibility of enhancing the well-being of patients, in addition to promoting their physical health. Therefore, it is more advantageous to perceive artificial intelligence (AI) not as a potential danger or replacement for human physicians but rather as aides that enhance patient well-being.

Similarly, Sharma and Carter (2017) assert that artificial intelligence cannot substitute human pathologists. The authors posit that within these deliberations, a misconception exists regarding the inclusion of tasks requiring advanced cognitive abilities and computational processes. These entities exhibit differences and are not considered identical. The focus has shifted from the dichotomy of human versus computer to the comparison of human versus human utilizing computer technology. This perspective aligns with the sentiments expressed by Chen & Asch (2017), albeit using different terminology. According to Chen and Asch (2017), optimal health performance cannot be attained by individual effort alone but rather through the combined efforts of both parties. The final determination will rest with the human decision maker, who will base their decision on the information and recommendations provided by the machines (Albu & Stanciu, 2015).

Conclusion

This article commences by presenting a range of explanations of artificial intelligence, followed by a subsequent exploration of the primary focus of our discourse, namely the societal ramifications associated with the emergence of AI. It has been deduced that the fundamental factors contributing to the efficacy of both human and artificial intelligence are flexibility and unpredictability. It is posited that the prevailing discourse surrounding the relationship between artificial intelligence (AI) and unemployment is founded upon a theoretical fallacy, as it fails to acknowledge the distinction between AI and automation. The subsequent subject of discussion pertained to the prevailing consensus regarding the correlation between automation and unemployment. Two major positions were identified. One perspective posited the emergence of artificial intelligence (AI) as a societal predicament, primarily attributable to the anticipated surge in unemployment.

Conversely, an alternative viewpoint contended that the advent of AI would also engender novel employment opportunities akin to analogous historical occurrences. Both narratives describe the expectation that repetitive and routine tasks will be automated, leading to their subsequent elimination. In the concluding section of our article, we undertook a sociological analysis to examine the future implications of AI and its societal ramifications. There is a strong probability that the current manifestations of artificial intelligence will exacerbate preexisting social inequalities and inequities. However, it is imperative to develop an ethical artificial intelligence system that benefits privileged social groups and extends its support to marginalized and underprivileged communities.

In conclusion, it is posited that, at least in the immediate and intermediate future, artificial intelligence (AI) and automation will be incapable of replacing human empathy, compassion, and associated emotions. This will consequently enhance the importance of the unique humane qualities inherent to our species. In conclusion, artificial intelligence (AI) and automation will not supplant human beings but rather serve as tools to augment our capabilities, enabling us to allocate more resources towards engaging in complex cognitive endeavours. However, it is crucial to consider artificial intelligence's ethical and sociological aspects. Excessive veneration for the advancement of artificial intelligence is disconnected from the prevailing social realities.

Recommendations

- Investigate the nuanced experiences of individuals and communities affected by AI adoption, including marginalized groups.
- Conduct comparative analyses across different regions and industries to understand variations in AI's societal impacts.
- Explore the role of governmental policies and regulations in shaping the effects of AI on employment and social inequality.
- Incorporate qualitative research methods, such as interviews and ethnographic studies, to gain deeper insights into stakeholders' perspectives.
- Examine the potential synergies between AI technologies and human labor to identify opportunities for collaborative innovation

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